



Durham

Home Energy Savings Program

Durham's Home Energy Savings Program (HESP) is designed to help households save energy through targeted home improvements. Approximately 200 homes will receive subsidized, professional retrofits through the program. This program is funded by the American Recovery and Reinvestment Act and Environmental Protection Agency Climate Showcase Communities grant. HESP is being offered for a limited time only, on a first come-first serve basis.

To qualify, homes must be 2,300 square feet or less of heated space, be within Durham County or City, and be current on all local taxes. If you have appliances (e.g. furnaces, hot water heaters, dryers, stoves, fireplaces, etc.) that use natural gas, propane, fuel oil, or kerosene and that are in the living space of the home, your house can only qualify if those appliances are properly vented. Homes that have unvented gas appliances in the heated living space and that may have other hazardous combustion features are not eligible for this program. See "Combustion Appliances" to determine if your appliance is vented or unvented.

The work done on qualifying homes includes the following:

- ★ sealing air leaks in heating and air conditioning ductwork;
- ★ installing programmable thermostats;
- ★ sealing air leaks in the attic floor and the crawlspace ceiling;
- ★ installing attic insulation;
- ★ installing high-efficiency showerheads and faucet aerators; and
- ★ installing carbon monoxide detectors.

Private contractors have been trained and certified by experts in how to perform these retrofits, and all of the retrofitted homes will receive a protocol assessment to review that the work was done to program specifications. Participants will pay \$400 and the City will pay up to \$1,600 per house.

These are energy improvements that most homes need and that provide big energy savings for the typical household. The average home energy bill in Durham is \$1,594 per year¹. A 20% energy savings, which we estimate could be achieved with this retrofit program, would save this average household \$318 per year.

The Home Energy Savings Program is made possible by the Environmental Protection Agency's Climate Showcase Communities Grant Program and federal stimulus funding from the US Department of Energy's Energy Efficiency and Conservation Block Grant program².

¹ US Department of Energy Home Energy Saver, <http://hesw1.lbl.gov>

² The preparation of this document was financed in whole or part through funds from the City of Durham's Energy Efficiency and Conservation Block Grant Program. This grant was made available to the City of Durham under provisions of the American Recovery and Reinvestment Act of 2009.

What are the benefits of a home energy retrofit?

- ★ The home improvements offered by this program are designed to reduce your home energy costs by an average of 20%. For the average family of 4, this can typically be over \$300 per year.
- ★ For every dollar you save on annual home energy bills due to home retrofits, your property value increases by as much as \$20 at resale³. For example, this program could increase the value of your home by over \$6,000.
- ★ The reduction in greenhouse gases from these retrofits could be roughly the same as if you stopped driving your car for five months of the year, thereby improving air quality and reducing health care costs due to pollution⁴. The retrofits themselves will create local jobs in the emerging green economy.

What is a QUALIFYING HOME?

- ★ 2,300 square feet or less of heated space
- ★ All electric homes will get priority (no PSNC bill). Homes with gas, oil, or propane will be accepted only if the appliances that use those fuels are outside the living space or are properly vented.
- ★ No major structural, moisture, or hazardous materials issues
- ★ Rental property must have approval from the landlord and tenants and demonstrate stable occupancy by the same tenant for at least 2 years.
- ★ Occupants must agree to allow access to energy use data for 1 year prior and 2 years after the retrofits.
- ★ Occupants or landlords must provide the contractor with the \$400 payment at the time of the initial home assessment.
- ★ Occupants must be available to be home when contractors come to do the work (3-4 visits).
- ★ Occupants must remove contents of attics and/or crawlspaces to allow contractor access to those spaces.
- ★ Occupants and landlords must be current on all local taxes.

What is the process for applying?

Interested residents can download application materials from www.GreenerDurham.net. Paper copies are also available at the City-County Sustainability Office (120 E. Parrish St., 1st Floor).

Applicants must fill out ALL applicable forms completely and turn them in either by mail, in person, or electronically. To submit via email, forms must be signed and scanned in. Electronic forms without signatures will be deemed incomplete. Applications will be accepted until all funds have been expended or the grant period ends, whichever comes first.

Via mail or in person:

Tobin Freid
Sustainability Manager
120 E. Parrish St., 1st Floor
Durham, NC 27701

On-line (preferred)

www.GreenerDurham.net

Via email:

energy@durhamnc.gov

³ "Evidence of Rational Market Valuations for Home Energy Efficiency," *The Appraisal Journal*, October 1998, pp. 401-409.

⁴ US Department of Energy Home Energy Saver, <http://hesw1.lbl.gov>; "Emission Facts: Greenhouse Gas Emissions from a Typical Passenger Vehicle," EPA420-F-05-004 February 2005.

What can I expect after I submit an application?

Once all completed and signed paperwork has been submitted, program staff will review applications to make sure they are complete, that the home seems to meet the criteria, and that all taxes are paid.

Program staff or a contractor will contact qualifying applicants within 6-8 weeks to schedule an initial assessment. At the assessment, the contractor will check the home to assess what work needs to be done, make sure no hazardous conditions exist (e.g. unvented gas appliances, unsafe electrical wiring, hazardous mold present, etc.). If the contractor deems the house to be eligible, the applicant must provide payment of \$400 at this time. The contractor will write up a scope of work to be signed by the occupant and the contractor before being submitted to the city for approval.

The contractor will set up a second appointment to come back to begin the work within 60 days of the initial assessment. Occupants must clear belongings out of attics and crawlspaces that might interfere with the contractors assessing the area for the work prior to this appointment. The work to be completed at this appointment is air sealing in the attic and crawlspace, sealing of ducts, installation of the programmable thermostat and carbon monoxide detector (as needed), and installation of high-efficiency showerheads and aerators (as needed). Program staff may also conduct a protocol assessment of the work at this time. If schedules do not allow for the assessment to happen concurrent with this appointment, program staff may need to set up a separate appointment for this assessment.

After the protocol assessment has been conducted and program staff has certified that work has been completed as required by the protocol, the contractor will schedule a final appointment to blow in the attic insulation.

Approximately 1 year after the retrofit, the occupant will be asked to fill out a short survey to help program staff better understand the impact of the program on energy use in the home.

**For more information, contact Tobin Freid, Durham City-County Sustainability Manager
(energy@durahmnc.gov or 919-560-7999) or visit www.GreenerDurham.net**



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